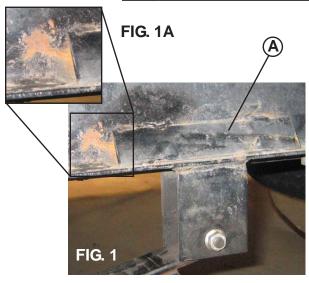


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LIP Sheet - 0135 revA

REPAIRING FRAME CRACKS IN AXLE LOCATION





P/N - 106124

- 1. REMOVE WHEEL IN FRONT OF CRACKED FRAME AREA.
- 2. PULL UNDER BELLY TO INSPECT BACKSIDE OF FRAME RAIL AND FRAME CRACK AREA. BE SURE AREA IS CLEAR OF INSULATION, OBSTRUCTIONS OR FIRE HAZARDS.
- 3. REMOVE REINFORCEMENT PLATE, SEE FIG.1 (A).
- 4. INSPECT CRACK, FIG. 1A AND CHECK FOR LENGTH OF CRACK.
- 5. GRIND CRACK TO CLEAN AREA FOR BETTER WELD PENETRATION.
- 6. REPAIR CRACK BY ADDING A WELD TO BOTH SIDES OF THE FRAME RAIL.
- 7. WELD NEW REINFORCEMENT PLATE ON, SEE FIG. 2. WELD COMPLETELY AROUND THE ENTIRE PERIMETER OF THE PLATE.
- 8. PAINT NEW PLATE AND WELD AREA.
- 9. RE-INSTALL WHEEL.
- 10. PERFORM AXLE RETRO (AS NEEDED). SEE PAGE 2.



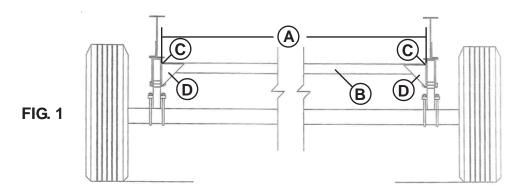
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LIP Sheet - 0135 revA

AXLE RETRO PROCEDURE

AN AXLE RETRO IS PERFORMED TO UNITS THAT HAVE OR COULD HAVE SPRING HANGER ISSUES. IT IS USED TO MINIMIZE OR EVEN PREVENT SWAY IN THE UNIT AND STRENGTHEN THE AXLE AREA.

- 1. STRAIGHTEN OR REPLACE SPRING HANGERS.
- 2. RECORD MEASUREMENTS OF THE DISTANCE BETWEEN EACH OF THE SETS OF THE SPRING HANGERS, **FIG. 1A**, ACROSS THE UNIT FROM CURB SIDE TO ROAD SIDE.



- 3. CUT 3 PIECES OF 2 X 2 11GA. TUBE STEEL, SEE **FIG. 1B**, AT THE 3 RECORDED MEASUREMENTS.
- 4. PLACE AND WELD THE 3 TUBES BETWEEN EACH OF THE 3 SETS OF SPRING HANGERS AS SEEN IN **FIG. 1C**.
- 5. USING 3 X 5 TRIANGULAR GUSSETS, REINFORCE THE TUBES BY WELDING 2-4 GUSSETS ONTO TUBE, I-BEAM AND SPRING HANGER, SEE **FIG. 1D**.



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LIP Sheet - 0088

AXLE HANGER MEASUREMENT PROCEDURE

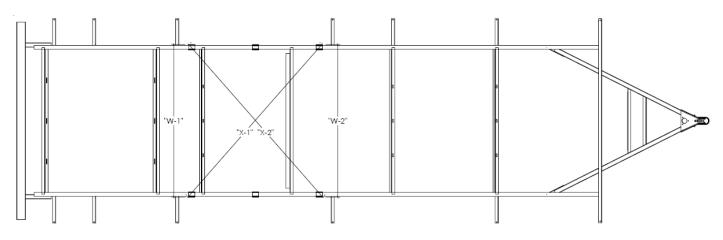


Fig. 1

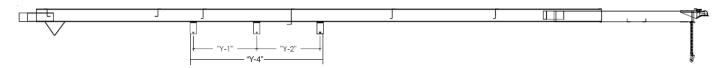


Fig. 2







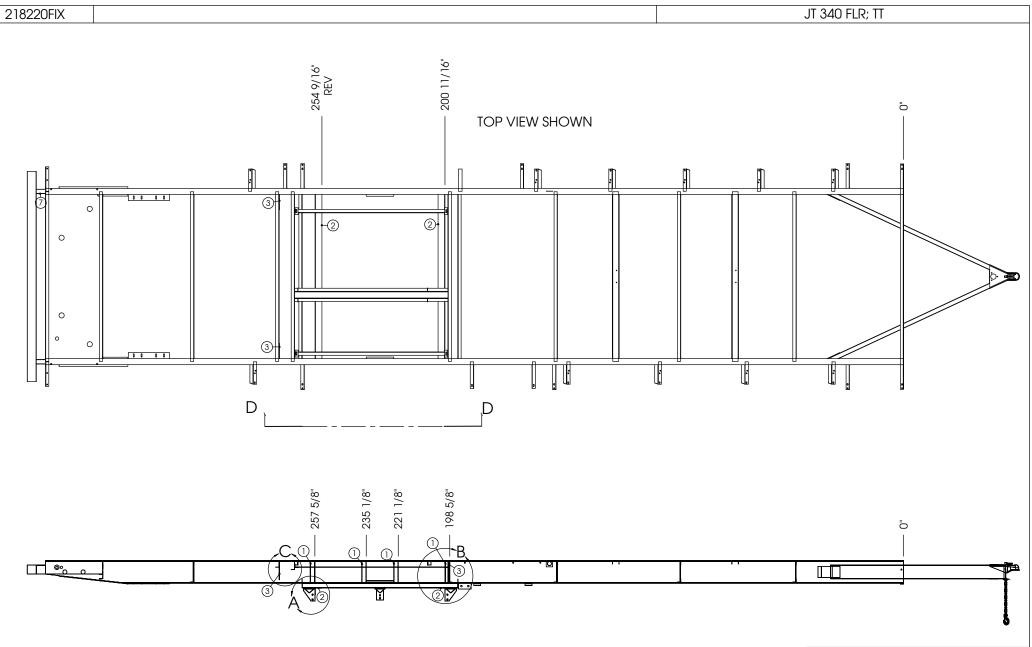
Fig. 3a Fig. 3b Fig. 4

- 1. UNIT MUST PULLED INTO WORK SPACE STRAIGHT AND EVEN.
- 2. WHEN MEASURING AXLE HANGER, MEASURE WHERE HANGER MEETS I-BEAM, SEE FIG. 3a & 3b.

 NOTE BE SURE TO MEASURE AS HIGH ON THE HANGER AS POSSIBLE IF OTHER COMPONENTS
 INTERFERE WITH MEASUREMENT POINT ON THE HANGER.
- 3. ON MEASUREMENTS W1 & W2, BE SURE TO MEASURE TOP OF HANGER.
- 4. WHEN MEASURING X1 AND X2, BE SURE TO MEASURE FROM THE TOP OF THE HANGER ON BOTH ENDS.
- 5. MEASURE Y1 AND Y2 (Y3 ON TRIPLE AXLES) ON CENTER OF BOLT.
- 6. MEASURE Y4 (OUTSIDE OF FRONT HANGER TO OUTSIDE OF REAR HANGER). FIG. 2.

NOTE: PLEASE ACCOMPANY THIS DOCUMENT WITH CLEAR PICTURES OF ALL POINTS OF ISSUE.

NOTE: BE SURE TIRE WEAR PICTURES ARE SHOT STRAIGHT ON. SEE FIG. 4



FRAME FIX INSTRUCTIONS

- 1) JACK UP REAR OF COACH SO CAMBER IS NOT LOST DURRING REPAIRS
- 2) CHECK HANGERS FOR SQUARE, IF FRAME IS DAMAGED RESQUARE
 3) ADD ANGLES FROM HANGER TO HANGER
 4) ADD TRIANGLE GUSSETS TO CROSSMEMBERS
 5) ADD TUBES TO OUTSIDE OF MAIN RAILS

- 6) CHECK FOR COLAPSED OUTRIGGERS IN THE AXLE AREA AND REPAIR AS NEEDED
- 7) SPRAY PAINT ALL COMPONENTS BLACK

OPEN RANGE

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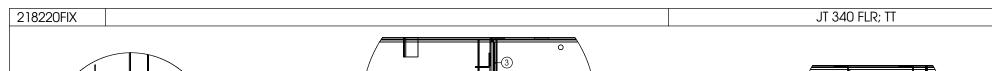
A Lippert Components Subsidiary 2703 College Ave. Goshen, In 46528 (574)535-1125 Phone (574)534-8172 Fax

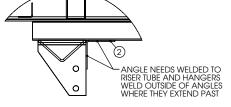
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218220FIX JT 340 FLR; TT AD

SCALE:1:42 MODEL YEAR: 2009

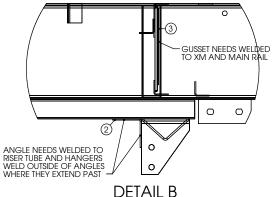
PAGE:1 OF 3





DETAIL A **SCALE 1:10**

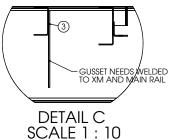
GUSSET NEEDS WELDED TO XM AND MAIN RAIL



DETAIL B SCALE 1:10

TYPICAL 8 PLACES

\Q



TUBES NEED WELDED TO INSIDE OF MAINS EACH SIDE GUSSET NEEDS WELDED TO XM AND MAIN RAIL (1) (1) 1 0 0 ANGLE NEEDS WELDED TO 0 ANGLE NEEDS WELDED TO 0 RISER TUBE AND HANGERS WELD OUTSIDE OF ANGLES WHERE THEY EXTEND PAST RISER TUBE AND HANGERS WELD OUTSIDE OF ANGLES WHERE THEY EXTEND PAST

SECTION D-D SCALE 1:15

MAKE SURE ALL HANGERS ARE SQUARE BEFORE ADDING ANGLES

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218220FIX A.00 SCALE:1:24 MODEL YEAR: 2009 PAGE: 2 OF 3

ITEM NO.	PART NUMBER	DESCRIPTION	Name	Gauge	Default/QTY.
1	116923	9 1/2" X 1" X 2"	Tube	11	8
2	284804	76" X 3" X 3"	ANG	11	2
.3	145944	8" X 8"	PLT	10	Δ

(3)

